

# MANUFACTURING

As the production hub for nearly all industries in the state, manufacturing is pivotal to California's economic health. No other sector has a greater economic multiplier effect than manufacturing, with the industry's 1.6 million workers<sup>54</sup> providing an additional 3.8 million jobs in other related sectors.<sup>55</sup> Long-term investments made by the state and industry in higher education, research and development and skill acquisition and improvement, have made California's manufacturing industry one of the most advanced in the world. Our state excels in providing sophisticated, high-value and customized production services, especially in the areas of computer and electronic products, machinery and equipment and chemical goods.

Although California's manufacturing industry enjoyed a slight increase in jobs (0.1 percent) over the past year,<sup>56</sup> over the past 15 years there has been a gradual decrease in manufacturing jobs as some companies have moved their manufacturing operations to less-developed regions with lower wages.<sup>57</sup> As those regions continue to make progress in higher education and significant investments in technology and manufacturing equipment, they are becoming increasingly competitive with California's manufacturing industry and its highly-skilled and well-paid workers.<sup>58</sup> However, in addition to the expected higher costs of supply chain management and shipping, some companies have discovered hidden costs associated with doing business in outlying regions. These unexpected operating expenses can be linked to reconciling the cultural, geographic, financial and production quality differences in such regions,<sup>59</sup> and also in establishing compliance with environmental, worker and consumer protections during fluctuations in political stability and government regulation.

California's diverse industrial mix, access to global markets through the ports, skilled workforce, world-class educational institutions and thriving retail and consumer base, will continue to make the state a place in which companies seek to do business. Some major Fortune 500 companies have recently chosen to transfer their manufacturing operations in less-developed countries to California.<sup>60</sup> For example, Nike has established new manufacturing operations in the San Francisco Bay Area for customized orders that require a short turnaround time. Since relocating to California, Nike has found that the benefits of a highly-skilled California labor force, a centralized production location close to retailers and access to expedited shipping services offset the other costs of doing business in California.<sup>61</sup>

## CALIFORNIA'S MANUFACTURING INDUSTRY

- In 2003, nearly 1.6 million workers were employed in the state's manufacturing industry.
- The average hourly wage for production workers in California's manufacturing industry was \$15.61 in December 2004.

Sources: California Employment Development Department and the Los Angeles Economic Development Corporation.

## CALIFORNIA'S TOP FIVE MANUFACTURED EXPORTS IN 2002

Commodity	Value (\$millions)
1. Computer and Electronic Products	\$39,672
2. Machinery, Except Electrical	\$9,518
3. Transportation Equipment	\$7,100
4. Chemicals	\$5,418
5. Miscellaneous	\$4,498

Source: California Technology, Trade and Commerce Agency

*"Manufacturing is a vital industry that can restore economic growth in California. Hopefully, we can give it the visibility and support it deserves."*

**David Braunstein**  
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<sup>54</sup> California Employment Development Department.

<sup>55</sup> California Advanced Manufacturing Leadership Forum, "Policies to Strengthen California Manufacturing," January 20, 2004, p. 2.

<sup>56</sup> California Labor Market Review, December 2004.

<sup>57</sup> Kosmont Partners and The Rose Institute of State and Local Government, "Manufacturing in California Executive Summary," The Keystone Group, March 2004, p. 12.

<sup>58</sup> California Healthcare Institute, "California's Biomedical Industry 2004 Report," June 2004.

<sup>59</sup> Ibid.

<sup>60</sup> Harvard Business School, "Locating for Lean Provision," *Harvard Business Review*, March 2005.

<sup>61</sup> Ibid.